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ABSTRACT

This paper reports an exploratory study that is the second in a series concerned with measuring Internet visibility as it influences colleges and universities. The purpose was to examine one possible source of Internet visibility, the association of eminent alumni with particular colleges and universities. College-educated U.S. presidents were chosen as the objects of study. Key variables studied were Internet search engine hits on presidents and their alma maters, measures of overlapping Internet visibility between presidents and alma maters, an overall measure of presidential eminence derived from a C-Span survey of professional historians, and historical recency. Results suggest that while eminence and recency are both associated with Internet visibility, their joint influence differs for living and nonliving presidents. For nonliving president, eminence and recency are distinct and independent sources of association with the Internet presence of the eminent alumni studied, presidents. For living presidents, eminence appears to be invisible as a factor in Internet visibility. The most recent presidents enjoy a huge advantage in Internet presence that corresponds with the rapid growth of the Internet itself. Regarding the association with Internet visibility of alma maters, it appears that eminence, while not yet a significant factor in this Internet age, appears to have a detectible role in the Internet presence of colleges and universities that were alma maters of nonliving presidents. The results are discussed in the context of the need to understand new conditions that might have been created in the Internet age in comparison with conditions that have remained relatively constant. (Author/SLD)

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Exploring Internet Visibility of Eminent Alumni:

Variables and Correlates

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SUMMARY

This paper reports an exploratory study that is the second in a series concerned with measuring Internet visibility as it influences colleges and universities. The purpose was to examine one possible source of Internet visibility, i.e., the association of eminent alumni with particular colleges and universities. In view of their high status in terms of historical and cultural significance, college-educated U. S. presidents were chosen as the objects of study. Key variables studied were Internet search engine hits on presidents and their *alma maters*, measures of overlapping Internet visibility between presidents and *alma maters*, an overall measure of presidential eminence derived from a C-Span survey conducted with professional historians, and historical recency. The results suggested that while eminence and recency both are associated with Internet visibility, their joint influence differs for the living versus non-living presidents. For the non-living presidents, eminence and recency are distinct and independent sources of association with the Internet presence of eminent alumni, i.e., presidents. For living presidents, eminence appears to be invisible as a factor in Internet visibility. The most recent presidents enjoy a huge advantage in Internet presence that corresponds with the rapid growth of the Internet itself. Regarding the association with Internet visibility of *alma maters*, we may conclude that eminence, while not yet a significant factor in this Internet age, appears to have a detectible role in the Internet presence of colleges and universities that were the *alma maters* of non-living presidents. The results are discussed in the context of the need to understand better what new conditions might have been created in the Internet age, versus what conditions have remained relatively constant.

INTRODUCTION

This paper reports an exploratory study that is the second in a series concerned with measuring Internet visibility as it influences colleges and universities. The first study (Ridley, 2002) explored measuring the visibility of institutions of higher learning in the Internet world by examining the frequency with which the institutions were cited within that world, using Internet search engine hits as the measure. Public and private colleges and universities in Virginia were the objects of study. The findings revealed that there is a huge span separating the lowest and highest numbers found, i.e., approximately a factor of 100. The highest numbers, not surprisingly, were reported for large (predominantly public) research universities with extensive research and graduate education resources; the lowest numbers were for small private colleges primarily focused on undergraduate instruction.

This preliminary study led the authors to raise further questions regarding the measurement and correlates of Internet visibility of higher education institutions in the United States. Further exploratory study (such as reported below) and a review of the literature led us to propose a conceptual model for understanding and measuring Internet visibility of colleges and universities (Matveev, Ridley & Cuevas, 2002).[1] The purpose of the current study is to examine one possible source of Internet visibility, i.e., the association of eminent alumni with particular colleges and universities. The reader should locate this source as part of "cultural capital" in our model. The following questions were addressed: Do eminent individuals, such as U.S. presidents, contribute to the cultural capital of an institution, in ways that can be measured? Does this contribution (and do its measurable effects) persist long after these eminent persons are deceased? Are such influences related to independent, reliable measures of eminence in particular fields (e.g., political leadership exhibited by U.S. presidents)? These are some of the issues that we sought, in a preliminary way, to investigate.

The Internet as an Unprecedented Phenomenon of the Late 20th Century

The growth of the Internet during the past few years, in virtually all of the measurable aspects, has been nothing short of phenomenal. Whether one considers the number of users, the number of sites, the world-wide reach, the volume of business conducted, the interconnectedness and interactivity that characterize Web sites, the amount of scholarly and other research that is published and/or conducted through the Internet—by all of these indicators and more, the same conclusion is reached. The importance and yet-to-be discovered potential of the Internet is one of the most remarkable phenomena of our times.

However, it remains to be seen whether institutions such as colleges and universities, the traditions of which date from many centuries ago, are prepared to understand, harness and use the power of the Internet. By their nature cautious and conservative, these institutions have a difficult time adapting to, understanding, and using a phenomenon that embodies such rapid change. Our thinking was that, if we could

contribute to the understanding of what creates institutional visibility on the Internet, in terms of cultural or other forms of capital, this information might contribute to the general ability both to understand and use the Internet wisely. Toward that end, we offer this study for the reader's reflection.

With regard to the current study, these reflections also raise the question of whether the cultural capital created by eminent individuals interacts differently with the Internet as a function of the closeness of these individuals in time to the age of the Internet. Even without an Internet, one might speculate that there is a compounding of influence over time, such that eminent individuals from an early period in our history created a legacy that has not faded but has persisted with the passage of time. Such a compounding of influence might appear in measures of Internet visibility. On the other hand, Internet visibility might be enhanced by the eminent alumnus' nearness to the present—even if before the Internet—since more recent historical events are more relevant to modern web sites and those who create and visit them. However, the question here is how much difference the Internet has made in the visibility of the individuals in modern versus historical times. In other words, has the Internet created special conditions that shape the visibility of eminent individuals in the present day, i.e., those living during the age of the Internet? We speculate that Internet visibility might be magnified for those individuals whose careers corresponded most closely in time with the Internet.

HYPOTHESES

Several tentative hypotheses guided this exploratory study. The first three concern relationships among Internet visibility (of the eminent alumni), historical era or recency, and alumni (presidential) eminence.

- First, if eminence in a particular field can be measured reliably and validly, that measure will be positively correlated with alumni Internet visibility.

- Second, we suggest that time-related effects on Internet visibility of alumni, independent of eminence, will be detectible during the period before Internet began to exert its influence, i.e., among the historical or non-living eminent alumni. However, we do not speculate what the shape of those effects might be.

- Third, we suggest that there is an influence of the Internet age upon Internet visibility; i.e., there will be a strong influence of recency within the Internet age upon Internet visibility.

The last two concern the relationships among eminence and Internet visibility of both the prominent alumni and their *alma maters*.

- Fourth, it will be possible to measure eminent individuals' contribution to the Internet visibility of their *alma maters*.

- Finally, while we do not speculate as to size of that contribution, we suggest that it will be correlated with the eminence of the particular alumni.

Rationale for Selection of Eminence in Political Leadership as the Study Focus

Among alumni of U.S. colleges and universities, U.S. presidents surely occupy a high status in terms of historical and cultural significance. In selecting this focus for the study, we do not prejudge the issue of whether different results might be found had a different focus been chosen. However, we do suggest that this focus might define an upper bound of ongoing influence of the cultural capital of institutions, as compared with other categories of eminent alumni that might be examined. It is also interesting as a choice of study because the historical span is so long—more than two centuries. This scope is long enough to allow us to examine time-dependent effects such as those proposed above, while at the same time looking for possible effects of more recent conditions created by the presence of the Internet during the lives of those whom we are studying.

METHODS

Internet Visibility

The methods used in this study were very similar to those used in Ridley (2002). We begin to measure Internet visibility, of individuals and institutions, by examining the frequency with which these entities are cited in the Internet world, or the part of that world that is accessible to us. A means of measuring such visibility is readily at hand: Internet search engines, which not only identify but count instances of word strings which correspond to the names of colleges and universities and eminent alumni. Thus, for the purposes of this article, "visibility" is defined as the number of hits generated through inputting the college's name into search engines, while controlling for false hits as much as possible. While other measures of Internet presence also are worthy of study (Matveev, Ridley, & Cuevas, 2002), this measure was acceptable for this study.

Since the Internet is dynamic and ever changing, it seemed important to capture the data at one moment in time. One problem with not doing so is that the numbers found, particularly for institutions, can vary by thousands from one day to the next. Thus, the date of May 10, 2002 was selected for gathering the data. The search engine used was Google.com. A previous study (Ridley, 2002) found a high degree of correspondence between results obtained using Google.com and Altavista.com. Therefore, for this exploratory study one search engine was deemed sufficient.

Like other search engines, Google.com offers several options. For example, the option "All Languages" was selected. In addition, there are various other options available, which may be studied by anyone who is interested by simply logging onto www.google.com and trying several examples. In general, the most literal option was used; that is, the exact string of words found in the most common version of the name or names being searched was used to match the searched web sites.

Care was taken to avoid ambiguity in order to control for false hits. As regards colleges and universities, we decided that the string to be inputted would consist of the formal name of the college or university. For the most part, this procedure was without ambiguity. However, there were several colleges and universities offering the possibility of ambiguity and inflated numbers. These included Union College, Williams College, and Miami University. For example, in order to avoid confusion with other institutions, the search for Union College specified the exclusion of the words "Hebrew" and "Atlantic" and further specified that the string "New York" should appear also somewhere in the searched web pages. Similarly, the search for "Williams College" excluded the strings "ymca," "Roger," "Xavier," "Saint," and "George." Finally, "Miami University" was searched with the exclusion of "Florida" and the inclusion of the word "Ohio." Inspection of selected results suggested that this method was reasonably effective.

The same care was exercised to reduce false hits for the names of presidents. In order to eliminate virtually all cases of mistaken identity, the president's name was preceded by the title, "President." This method of reducing false hits undoubtedly exacted some cost in missing some potentially valid hits, since controlling the false hit rate inevitably relaxes the miss rate, and vice versa. However, for this study, the accent was placed on accuracy in the sense of controlling false hits.

Since there was some discretion regarding what name to enter for a president (e.g., "Ulysses S. Grant" versus "Ulysses Grant" or "Franklin D. Roosevelt" versus "Franklin Roosevelt" versus "Franklin Delano Roosevelt"), it was decided to use the option that maximized the number of hits. So, for example, "Ulysses Grant" and "Franklin D. Roosevelt" were chosen. The full middle name was used for "William Howard Taft," "William Henry Harrison," and "John Quincy Adams." The latter example, "John Quincy Adams," was necessarily used to distinguish the sixth president from his father, "John Adams," the second president.

"Selective hits" were also measured. They were intended to reveal when *both* the president and his alma mater were found together in the Internet search. In practice, the method had some limitations for this purpose. A "selective hit" starts with the specific search definition (as discussed above) for locating one of the two targets for counting hits, i.e., eminent alumni or their *alma maters*. To these specific search definitions is added the requirement that the specific names for the other member of the pair must also appear in the web page. For example, when "President Franklin D. Roosevelt" was entered as the exact string searched for, the number 25,700 was found. The next search added the requirement that both of the words "Harvard" and "University" must also appear in the web pages being searched. When that additional requirement was added, the number of hits fell to 1560. Similarly, the search for the exact string, "Harvard University," yielded 919,000 hits; but when the additional requirement was added that all of the words "President," "Franklin," "Roosevelt," had to appear in the web page ("D." not being required because it is so numerous), the number of hits found was 5,350. This example nicely illustrates the ambiguities and imperfections involved in trying to capture,

with an imperfect device, the intersection or overlapping sites between the 25,700 found for "President Franklin D. Roosevelt," and the 919,000 found for "Harvard University." Theoretically, given a perfect device, the same number should be found twice. Evidently, the ambiguities in each individual search are found to be even greater when looking for their intersection.

Despite these ambiguities, it is important wherever possible to seek validation through attempting to measure the same thing two or more ways. The two methods provide this point of validation. In addition, one "special hit" measure, starting with the search for the institutional name, was used in this paper as the basis for estimating the contribution of the president to the Internet presence of the institution.

Recency

"Recency" of a president was defined in terms of the time since the beginning of the presidential term.

Eminence

A convenient source for measuring "presidential eminence" was identified on a web site created by C-Span to accompany its "American Presidents" series. The web page states the following concerning the survey:

"As the final element of our yearlong American Presidents series, C-SPAN conducted a Survey of Presidential Leadership, in which historians & viewers participated online. The survey rated 10 qualities of presidential leadership established by our advisory team, including each president's effectiveness within the context of our nation's changing expectations of the presidency. We sent the survey to the approximately 90 historians and presidential experts who've participated in our series."

"The C-SPAN Survey of Presidential Leadership was crafted by a team of four historians and academics who have been deeply involved in the American Presidents series-Douglas Brinkley of the Eisenhower Center, Edna Greene Medford of Howard University, Richard Norton Smith of the Ford Library, and John Splaine of the University of Maryland."

For purposes of this exploratory study, only the summative scores and ranks of overall eminence (or "presidential leadership") were used. The ten qualities that were rated contributed to the overall scores. Those qualities included: public persuasion, moral authority, relations with Congress, crisis leadership, international relations, vision/setting agenda, economic management, administrative skills, pursued equal justice for all, and performance within context of times.

Also, the nature of the study topic limited the selection of presidents to those who had attended and were graduated from a college or university. For that reason, the reader will notice the absence of some presidents in the listing of data in Table 1 (e.g., George

Washington, Abraham Lincoln, Harry Truman, etc. In addition, the current president, George W. Bush, was not included in the C-Span study, which took place prior to his administration. Therefore, some of the comparisons of variables necessarily do not include Bush.

For this exploratory study, simple correlation coefficients were computed.

Study Limitations

The authors emphasize that the current study was carried out for exploratory purposes only. Consequently, less investment was made in terms of rigorous methods than with casting a broad net for the purposes of suggesting hypotheses and testing ideas, in a very preliminary way, prior to conducting more definitive research. The study's "conclusions," therefore, should be regarded as tentative and in need of further study in a more rigorous, verification mode.

Specific limitations to be noted relate to the use of correlation analysis with a small sample that probably is not normally distributed. While the sample size is fixed and cannot be enlarged beyond the number of college-educated presidents, the likely violation of assumptions underlying correlation analysis should be addressed in follow-up study by adopting different methods. Assumptions that should be examined in a future study include (as mentioned) the normality of frequency distributions, levels of measurement of variables, linearity of variables, homogeneity of variance, and the possibility of spurious correlations. These limitations should be borne in mind while perusing the following results and discussion.

These caveats having been stated, we believe that the study as reported is appropriate for the above-stated exploratory purposes.

RESULTS AND DISCUSSION

With the exception of recency, the data used in this study are found in Table 1. Recency is implicit within the table because the presidents appear in historical order. The results follow the order of the tentative hypotheses above.

- First, if eminence in a particular field can be measured reliably and validly, that measure will be positively correlated with Internet visibility.

Over all presidents having data in Table 1 (excluding the current president for the reason given above), there was a correlation coefficient of +.13 found between eminence and Internet visibility measured by search engine hits. This result was not statistically significant.

However, when a division was made between living and non-living presidents (Nixon and before versus Ford and later), the results were quite different. For non-living presidents, a correlation coefficient of +.57 was found between eminence and Internet visibility. This result was significant beyond the .01 level of confidence. For the living presidents, on the other hand, the correlation coefficient of +.01 was found, which of course was not significant.

- Second, we suggest that time-related effects on Internet visibility, independent of eminence, will be detectible during the period before Internet began to exert its influence, i.e., among the historical or non-living eminent alumni. However, we do not speculate what the shape of those effects might be.

The correlation between recency and search engine hits, over the non-living presidents, was +.57, which was significant beyond the .01 level of confidence. When controlling statistically for the influence of eminence in the correlation (using a partial correlation), the partial correlation found was +.71, an even stronger and more significant result. In other words, search engine hits are positively affected by recency; the more recent the president, the greater the number of search engine hits. This association is statistically independent of the eminence of the presidents.

- Third, we suggest that there is an influence of the Internet age upon Internet visibility; i.e., there will be a strong influence of recency within the Internet age upon Internet visibility.

When recency and search engine hits were correlated over all the presidents, a correlation coefficient of +.55 was found, which was significant beyond the .01 level of confidence. However, when the division is made again between living and non-living presidents, there is a clear difference in the results. As stated above, for non-living presidents, the correlation coefficient was +.57 ($p < .01$). For living presidents, the result was +.97, which was significant beyond the .01 level of confidence.

There is a tremendous acceleration of the Internet visibility measure during the administrations of living presidents (see Figure 1). The distribution of these values suggests that a Spearman rank correlation might be more appropriate than the Pearson correlation used earlier. This calculation yielded a new correlation of +.94, which is also significant beyond the .01 level of confidence.

Summarizing the above results, they suggest that eminence and recency both are associated with Internet visibility. However, their joint influence appears to be different for the living and non-living presidents. For the non-living presidents, eminence and recency both have a modest level of association with Internet presence (about +.57); they are distinct and independent sources of association. For living presidents, eminence is completely invisible as a factor in Internet visibility. Recency appears to tell the whole story regarding Internet presence in the Internet age. The most recent presidents enjoy a huge advantage in Internet presence that corresponds with the rapid growth of the Internet itself.

- Fourth, it will be possible to measure eminent individuals' contribution to the Internet visibility of their *alma maters*.

In general, prior to the last several presidents, the number of hits on presidents was far less than the number of hits on their *alma maters* (see Table 1). This fact alone suggests that even presidents have, at best, a minor role on the Internet presence of the institution they attended. Some presidents who attended small private colleges may be an exception. For example, Ronald Reagan showed far more Internet hits than Eureka College, his *alma mater*. This observation might suggest, in at least some cases, there was a substantial contribution of the president to the college's Internet presence. However, to make the case more strongly, other methods were used.

As explained in the method section, two "special hit" measures provided the basis to attempt to measure the eminent alumnus' contribution to Internet visibility of their alma maters. No attempt was made to apply these measures to currently living presidents, for the reason that (as noted immediately above) eminence appears to make virtually no difference in Internet presence in the age of the Internet. However, for the non-living presidents, these two measures correlated +.82, which is sufficiently high to provide validation, at least for the historical period of non-living presidents. This result suggests that the two measures, despite ambiguities, are strongly associated over these presidents and thus provide a reasonable estimate of the intersection of Internet hits for presidents and their *alma maters*. For this exploratory study, only one "special hit" measure was used, i.e., the one beginning with the Internet hits on the *alma mater*, as explained above. It provides the basis for addressing the fifth hypothesis below.

The exercise of creating these special variables leads us to conclude that we now possess measures that are relevant to the issue identified above, i.e., the contribution of eminent individuals to the Internet visibility of their *alma maters*. These special variables do not directly measure such a contribution; however, as will be seen they provide the basis for an analysis suggesting that alumni eminence has a detectible role in the institution's Internet presence.

- Finally, while we do not speculate as to size of that contribution, we suggest that it will be correlated with the eminence of the particular alumnus.

The correlation coefficient, between the "special hit" measure mentioned above and eminence was only +.34, which is marginally significant at best. However, the size of the special hit measure clearly depended on the Internet presence of the institution. For example, Harvard University has a huge Internet presence, far greater than that of the small private colleges attended by some of the presidents. Harvard's Internet presence alone can account for a great deal of the large special hit measure for certain presidents, e.g., the Roosevelts. At the same time, the Roosevelts were highly eminent presidents. The question is whether we can find a way to estimate how much of the high special hit measure can be attributed to presidential eminence and how much to the sheer size of the influence of Harvard. Thus, for a test of association to be sensitive to the contribution of

eminent alumni, independent of the size of the *alma mater* and its Internet presence, a special approach must be taken.

Toward that end, we calculated a partial correlation to determine the degree of association between the special hit measure for the *alma mater* and eminence, while controlling statistically for the size of the Internet presence of the *alma mater*. The result was a correlation coefficient of +.62, which is significant beyond the .01 level of confidence. We may tentatively conclude that alumni eminence does make some difference, although more direct and sensitive tests of its influence would be desirable.

Summarizing the results from the above two issues, we may conclude that eminence, while not yet a significant factor in this Internet age, appears to have a detectible role in the Internet presence of colleges and universities that were the alma maters of non-living presidents.

Implications and Future Directions of Research

It is a fair question to ask what all of these stimulating and provocative results might mean for modern colleges and universities, which seek to use the Internet skillfully and intelligently. It is a truism that no college or university can rewrite its history to claim the ongoing cultural legacy of alumni who are not their own. However, our results might be interpreted to suggest that in this Internet age, new opportunities have been created, in some sense rewriting the rules of what makes an impact upon Internet users. If such a conclusion holds up, it would offer hope to younger or less well-endowed colleges, since massive resources and institutional momentum might need to give way to initiative, creativity, and imaginative flair.

There is, of course, a controversy brewing over this very issue of whether the Internet has, in a sense, leveled the playing field. There are two competing perspectives on the implications of the Internet for institutional visibility. Optimists predict that the Internet reduces inequality by lowering the cost of information and thus enhancing the ability of smaller and less wealthy institutions to gain visibility (Hauben & Hauben, 1997). Skeptics argue that the greatest benefits will accrue to wealthier institutions since they have used their resources to establish Internet presence sooner and may penetrate the Internet more productively, thus exacerbating existing inequality among higher education institutions (DiMaggio & Hargittai, 2001; Klassen, 2002; Klassen & Sitzman, in press).

However, given latitude for speculation, some suggestions come to mind. If one can discern any way in which the study suggests how the Internet may have changed the rules, it would be this: historical cultural legacy has its limits in the Internet age. The reach of the Internet back into the past also is limited. We find a picture here that is reflective of much of our culture—impatient, on the move, having a finite attention span, and feeding insatiably upon current information. Thus, it is no cause for despair, but may even signal opportunity, when eminent people are hard to find on the alumni rolls.

The college or university that highlights the accomplishments of its alumni, may be doing itself a favor in the long run, if by so doing it can help them gain wider recognition including Internet visibility. The principle here is that of bread cast upon the waters that returns to prosper the source. If an institution is privileged to have nurtured a president, that may be all to the good—but the institution would be advised to recognize the limitations of even that association. Let us suppose the president or other eminent alumni is a source of unalloyed pride (which is not always the case). Even then, that permanent association may lose its luster and have limited "information highway/street value," since part of the genius of the Internet is to continually reflect and feed upon the boiling, constantly shifting variety of modern society.

An institution might be well advised to follow the example of the University of North Carolina's web site, which acknowledged James K. Polk as its most prominent alumnus (after over 150 years), then quickly went on to acknowledge many others: "Alumni of the University include US President James K. Polk, author Thomas Wolfe, journalist Charles Kuralt, former White House Chief of Staff Erskine Bowles, corporate banker Hugh McColl, journalist Roger Mudd, actor Andy Griffith, designer Alexander Julian, actor Sharon Lawrence, sportscaster Stuart Scott, basketball greats Michael Jordan, and Vince Carter, World Cup and Olympic soccer player Mia Hamm, and track standout Marion Jones." Whoever the prominent alumni might be, it can never hurt to bring them out for display and promote them on the Internet. Indeed, it could be argued that there will be more reciprocal gain in promoting relatively less well know alumni than those who already have huge reputations or have been dead for over a century.

Speculation aside, our study, or any single study, cannot begin to resolve the issues that the subject of institutional Internet visibility raises. As an exploration, the study provides one more brick in the ongoing effort to construct a better understanding of the Internet. Every institution must make adjustments to the Internet quickly; it is changing much too rapidly to permit us the luxury of desultory and tentative applications. We cannot wait for all the data to come in. Nonetheless, we need to balance the need for action with the effort needed to assess which endeavors will lead to the greatest payoffs. This study offers a contribution toward that goal.

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NOTE

1. The conceptual model proposed by the authors (Matveev, Ridley, & Cuevas, 2002) is briefly stated as follows. The model presents the relationships and the direction of relationships between our theoretical constructs (latent variables). In our model, we distinguish two related phenomena that are critical to our research questions: (a) Internet visibility and (b) institutional reputation. We treat these constructs as endogenous variables, i.e., variables that are affected by one or more other latent variables in the model. While there exist multiple conceptualizations of these phenomena and other latent constructs in the model, for the sake of analysis we refer to them as distinct phenomena, recognizing that the model may generate different results when the phenomena are differently conceptualized and operationalized. Institutional reputation, of course, pre-existed Internet visibility, and measures of reputation directly influence Internet visibility (much more than the reverse direction of influence). In turn, multiple covarying measures of capital are conceived (technological, economic, structural, human, and cultural), all of which influence the two phenomena under study directly. In addition, they exert an indirect influence upon Internet visibility through institutional reputation.

TABLE ONE

Search Engine Hits of Presidents and Their *Alma Maters*, Selective Hits (defined above), and Presidential Eminence

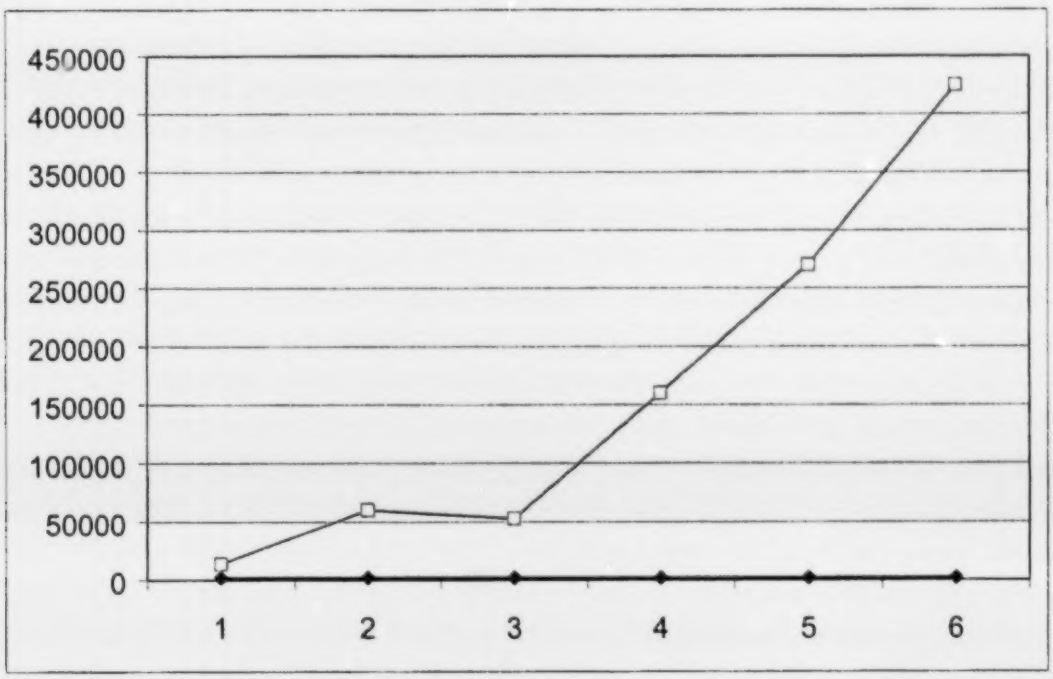
College-Educated Presidents	Internet Hits	Hits with college included	College/University	Internet Hits	Hits with president included	Score	Rank
John Adams	5,750	358	Harvard University	919,000	12,500	598	16
Thomas Jefferson	11,100	622	College of William and Mary	109,000	3,400	711	7
James Madison	4,070	157	Princeton University	627,000	11,900	567	18
James Monroe	3,860	361	College of William and Mary	109,000	1,210	602	14
John Quincy Adams	3,880	304	Harvard University	919,000	2,100	564	19
William Henry Harrison	1,650	219	Hampden-Sydney College	11,200	219	329	37
John Tyler	2,280	301	College of William and Mary	109,000	1,280	369	36
James K. Polk	2,030	272	University of North Carolina	692,000	1,200	632	12
Franklin Pierce	2,350	75	Bowdoin College	45,100	929	286	39
James Buchanan	2,820	122	Dickinson College	41,600	480	259	41
Ulysses S. Grant	4.300	212	United States Military Academy	32,900	493	403	33
Rutherford B. Hayes	2,170	52	Kenyon College	33,400	243	477	26

James A. Garfield	1,350	79	Williams College	60,600	258	444	29
Chester A. Arthur	1,310	163	Union College	30,500	386	423	32
Benjamin Harrison	3,830	90	Miami University	78,700	361	426	31
William McKinley	6,610	67	Allegheny College	24,800	246	601	15
Theodore Roosevelt	22,800	1,560	Harvard University	919,000	4,010	810	4
William Howard Taft	3,120	218	Yale University	553,000	1,310	491	24
Woodrow Wilson	17,400	1,010	Princeton University	627,000	10,700	723	6
Calvin Coolidge	6,670	113	Amherst college	76,900	322	451	27
Herbert Hoover	5,910	379	Stanford University	906,000	2,710	400	34
Franklin D. Roosevelt	25,700	1,560	Harvard University	919,000	5,350	876	2
Dwight D. Eisenhower	10,700	615	United States Military Academy	32,900	385	699	9
John F. Kennedy	58,200	3,010	Harvard University	919,000	53,700	704	8
Lyndon Johnson	15,400	283	Southwest Texas State University	81,400	435	655	10
Richard Nixon	26,500	130	Whittier College	16,500	501	477	25
Gerald Ford	14,000	220	University of Michigan	504,000	1,960	495	23
Jimmy Carter	60,000	697	United States Naval Academy	26,200	193	518	22
Ronald Reagan	52,700	277	Eureka College	7,480	779	634	11

George Bush	160,000	3,260	Yale University	553,000	3,470	548	20
Bill Clinton	270,000	3,460	Georgetown University	325,000	11,800	539	21
George W. Bush	425,000	12,570	Yale University	553,000	9,510	N/A	N/A

Figure One

Internet Search Engine Hits on Living U. S. Presidents in Chronological Order (1-6 = Ford, Carter, Reagan, G. Bush, Clinton, G. W. Bush)



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